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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,672	07/31/2006	Kurt Zubler	JFIE7.001APC	8335
20995 7590 08/04/2010 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614				
EXAMINER				
PAIK, SANG YEOP				
ART UNIT		PAPER NUMBER		
3742				
NOTIFICATION DATE		DELIVERY MODE		
08/04/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/550,672

Applicant(s)

ZUBLER, KURT

Examiner

SANG Y. PAIK

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 and 9-19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 24 May 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zychek (US 6,252,202) in view of Takeda (US 6,105,483).

Zychek shows the structure claimed except including a hood-shaped firing chamber that is closed by a bottom plate wherein the chamber is supported or suspended at the upper end of a guide column of a support, and a pneumatic cylinder mounted on the firing chamber. But, Zycheck does not explicitly show at least two pressure reducers.

Takeda shows that it is well known in the art to provide a plurality of pressure reducers to control a pressure in the pneumatic cylinder, and Takeda also shows a control unit with a data processor that executes instructions supplied from a data and program storage with a signal interface.

In view of Takeda, it would have been obvious to one of ordinary skill in the art to adapt Zychek with the means of a plurality of pressure reducers with pressure sensors or gauges that can be set to different pressure settings, or with a pressure regulator, to provide the chamber with a desired working pressure, and it would also have been

obvious to adapt ZycheK with a control unit having a program unit including a program storage or memory card, to more effectively process a muffle that can be placed in the chamber.

With respect to the recitation of having the pressure reducers on a plate-like support basis, it would have been obvious to one of ordinary skill in the art to provide the pressure reducers or the pressure regulator on the plate-like support in ZycheK for convenient access and control to a user, and it would also have been obvious to one of ordinary skill in the art to set the pressure reducers at the recited pressure range as a matter of a routine experimentation to achieve a desired working pressure for a particular application.

With respect to the recited duct in a guide column, it is noted ZycheK teaches that various electrical and vacuum lines connections are at the back of the unit, and in light of this disclosure, it would have been obvious to one of ordinary skill in the art to provide a duct or ducts in the back column of the support unit to safely and conveniently to route the electrical and vacuum line connections to the plate like support where controllers can be arranged to a user.

3. Claims 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZycheK in view of Takeda as applied to claims 1-7, 9 and 10 above, and further in view of Jones (US 6,851,529).

ZycheK in view of Takeda shows the structure claimed including electronically controllable working pressures but does not show for a proportional pressure regulator.

Jones also shows that it is known in the art to provide a pressure regulator to set the pneumatic cylinder to a desired specific working pressure.

In view of Jones, it would have been obvious to one of ordinary skill in the art to adapt Zycek, as modified by Takeda, with a proportional pressure regulator that can provide any desired specific pressures, including the recited pressures, that is also conveniently controlled electronically to process a muffle in the chamber.

Response to Arguments

4. Applicant's arguments filed 5/24/10 have been fully considered but they are not persuasive.

With respect to Takeda, the applicant argues since the multiple pressure reducers are used to set incremental pressures and for purposes different from that of the applicant's invention, there is no motivation to combine to modify Zycek. This argument is not deemed persuasive it is noted that Takeda is applied to show that it is well known in the art to provide a pneumatic cylinder with a plurality of pressure reducers to provide a controlled working pressures for varying pressing force, and since the different working pressures results in a different pressing force, it would have been obvious to one of ordinary skill in the art to adapt Zycek with a controlled working pressures to the piston cylinder to provide for a controlled pressing force. Also, as Zycek and Takeda makes use of a cylinder piston or plunger for applying pressing forces, they are also deemed to be in the same field of endeavor for one of ordinary skill in the art to modify Zycek with the teaching shown in Takeda to provide for the predictable structure as that of the claimed invention.

With respect to Jones, the applicant also argues that one of ordinary skill in the art would not have looked to teaching of Jones to modify that Zycheck, but this argument is not deemed persuasive since Jones which also makes use of a cylinder piston as that shown in Zycheck is deemed to be in the same field of endeavor to one of ordinary skill in the art, and modifying Zycheck with the teachings of Jones would have also resulted in the predicable structure as that of the claimed invention.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **SANG Y. PAIK** whose telephone number is (571) 272-4783. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SANG Y PAIK/

Primary Examiner, Art Unit 3742